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| 10/829,567 | 04/22/2004 | Hiroyuki Ogino | MAT-8183US1 | 6348 |
| 23122 | 7590 | 08/19/2004 | EXAMINER | |
| RATNERPRESTIA | | | MARTIR, LILYBETT | |
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DATE MAILED: 08/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/829,567

Applicant(s)

OGINO ET AL.

Examiner

Lilybett Martir

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 13-18 and 21-23 is/are rejected.
- 7) ☒ Claim(s) 11, 12, 19 and 20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/22/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 7 and 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Richter et al. (Pat. 4,943,757).
 - With respect to claim 7, Richter et al. teaches a pressure-sensitive means as in element 5 for generating an output signal depending on deformation; and support means as in element 6 for supporting said pressure-sensitive means at said one of said opening and said opening-closing unit, said support means being capable of being bent along a shape of one of said end of said opening-closing unit and said edge, and judging means (Col. 2, lines 42-47) for judging the contact of the object with said pressure-sensitive sensor on the basis of an output signal of said pressure sensitive Sensor.
 - With respect to claim 13, Richter et al. teaches a said support means 6 comprising elastic material more flexible than said pressure sensitive means (note that element 6 is flexible and

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allows the transmission of loads to mechanism 5 as in Col. 2, lines 23-31).

- With respect to claim 14, Richter et al. teaches said support means 6 having a hollow portion provided therein as in the hollow portion that holds element 5 (Col. 2, lines 23-31).
- With respect to claim 15, Richter et al. teaches said pressure-sensitive means is incorporated in said support means (Col. 2, lines 23-31, as noted in Figure 2).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1,5 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter et al. (Pat. 4,943,757) in view of Oschima et al. (Pat. 5,907,213).

- With respect to claim 1, Richter et al. teaches a pressure-sensitive means as in element 5 for generating an output signal depending on deformation; and support means as in element 6 for supporting said pressure-sensitive means at said one of said opening and said opening-closing unit, and judging means (Col. 2, lines 42-47) for judging the contact of the object with said pressure-sensitive sensor on the basis of an output signal of said pressure sensitive

Sensor. Richter et al. fails to teach including a vibration-damping portion for damping vibration propagated to said pressure-sensitive means. Oshima et al. teaches modifications which dampen the propagation of external vibrations (Col. 1-2, lines 66-3, Col. 2-3, lines 60-7). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teachings of the safety apparatus of Richter et al. utilizing the teachings of the harness of Oshima et al. by damping vibrations to further increase the connection reliability.

- With respect to claim 5, Richter et al. teaches judging means (Col. 2, lines 42-47) that judges and judges the contact of the object with said pressure-sensitive sensor on the basis of the integral value. Richter et al. fails to specifically teach said judging means calculating an integral value of the output signal of said pressure-sensitive means per unit time. Since it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex Parte Masham (2 USPQ F.2d 1647 (1987)), it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teachings of the safety apparatus of Richter et al. by utilizing its electronic circuit means to calculate an integral value of the output

signal of said pressure-sensitive means per unit time to further allow for measurements to be made knowing the periods of time elapsed therefore increasing the accuracy of the data obtained by said sensor.

- With respect to claim 8, Ritcher et al. teaches a support means as in element 6, but he does not disclose said one of said opening and said opening/closing unit including a bent part, and said support means supports said pressure-sensitive means at said bent part. Oshima et al. teaches his opening and opening/closing arrangement having a bent portion as noted in the shape of element 2 in Figure 2 (the frame is not straight). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teachings of the safety apparatus of Ritcher et al. utilizing the teachings of the harness of Oshima et al. by arranging said pressure-sensitive means in a bent portion to facilitate making measurements in a part that has a different type of shape and therefore make said apparatus adaptable to different types of vehicles.
- With respect to claim 9, Ritcher et al. teaches pressure-sensitive means that has an elongated structure as in element 5, but he doesn't specifically teach said structure comprising a central electrode; a piezoelectric layer around said central electrode; and an outside electrode around said piezoelectric layer. Oshima et al.

teaches utilizing a coaxial structure comprising a central electrode 12; a piezoelectric layer around said central electrode as in element 14; and an outside electrode 16 around said piezoelectric layer. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teachings of the safety apparatus of Richter et al. utilizing the teachings of the harness of Oshima et al. by utilizing a coaxial structure to therefore obtain high connection reliability with low interference.

5. Claims 16- are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter et al. (Pat. 4,943,757) in view of Oshima et al. (Pat. 5,907,213) and further in view of Racine et al. (Pat. 5,592,060).

- With respect to claim 16, Richter et al. teaches a pressure-sensitive means as in element 5 for generating an output signal depending on deformation; and support means as in element 6 for supporting said pressure-sensitive means at said one of said opening and said opening-closing unit, said support means being capable of being bent along a shape of one of said end of said opening-closing unit and said edge, and judging means (Col. 2, lines 42-47) for judging the contact of the object with said pressure-sensitive sensor on the basis of an output signal of said pressure sensitive Sensor. Richter et al. fails to teach providing the sensing arrangement in a slide door and said slide door have

undulated portions, wherein said one of said opening and said slide door has an end having a bent part corresponding to said undulated portions, and wherein said support means supports said pressure-sensitive means at said bent part as to allow said support means to be bent. Oshima et al. teaches utilizing his arrangement 20 in a bent portion as in element 2 in Figure 2.

Racine et al. teaches utilizing his assembly 30 in a sliding door of a vehicle 940. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teachings of the safety apparatus of Richter et al. utilizing the teachings of the harness of Oshima et al. and further utilizing the teachings of the assembly of Racine et al. by arranging said pressure-sensitive means in a bent portion of a sliding door or any type of vehicle door to facilitate making measurements in a part that has a different type of shape and therefore make said apparatus adaptable to different types of vehicles.

- With respect to claim 17, Richter et al. teaches pressure-sensitive means that has an elongated structure as in element 5, but he doesn't specifically teach said structure comprising a central electrode; a piezoelectric layer around said central electrode; and an outside electrode around said piezoelectric layer. Oshima et al. teaches utilizing a coaxial structure comprising a central electrode

12; a piezoelectric layer around said central electrode as in element 14; and an outside electrode 16 around said piezoelectric layer. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teachings of the safety apparatus of Richter et al. utilizing the teachings of the harness of Oshima et al. by utilizing a coaxial structure to therefore obtain high connection reliability with low interference

- With respect to claim 21, Richter et al. teaches a said support means 6 comprising elastic material more flexible than said pressure sensitive means (note that element 6 is flexible and allows the transmission of loads to mechanism 5 as in Col. 2, lines 23-31).
- With respect to claim 22, Richter et al. teaches said support means 6 having a hollow portion provided therein as in the hollow portion that holds element 5 (Col. 2, lines 23-31).
- With respect to claim 23, Richter et al. teaches said pressure-sensitive means is incorporated in said support means (Col. 2, lines 23-31, as noted in Figure 2).

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686

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F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

7. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

8. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

- Claims 1-7, 10 and 13-15 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4, 10-11 and 13-16 of U.S. Patent No. 6,747,399. Although the conflicting claims are not completely identical, they are not patentably distinct from each other because there are no structural differences in the above-mentioned claims.
- Claims 16-18 and 21-23 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 3, 10-11 and 13 of U.S. Patent No. 6,747,399 in view of Oshima et al. (Pat. 5,907,213) and further in view of Racine et al. (Pat. 5,592,060). Oshima et al. teaches utilizing his arrangement 20 in a bent portion as in element 2 in Figure 2. Racine et al. teaches utilizing his assembly 30 in a sliding door of a vehicle 940. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teachings of the safety apparatus of Richter et al. utilizing the teachings of the harness of Oshima et al. and further utilizing the teachings of the assembly of Racine et al. by

arranging said pressure-sensitive means in a bent portion of a sliding door or any type of vehicle door to facilitate making measurements in a part that has a different type of shape and therefore make apparatus adaptable to different types of vehicles.

Allowable Subject Matter

9. Claims 11-12 and 19-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, or if the limitations in said claims are inserted in the base claim, including all of the limitations of the base claim and any intervening claims.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lilybett Martir whose telephone number is (571)272-2182. The examiner can normally be reached on 9:00 AM to 5:30 PM.

11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571)272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


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12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lilybett Martir
Examiner
Art Unit 2855

LOM



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